

REMARKS

An interview was held between Scott F. Diring and Examiner Portis on August 13, 2007. The iterative technique employed by Applicants was discussed. Also, the clarity of the claim language with respect to the iterative technique was also discussed. No specific agreement was reached.

Claims 1-12, 14, 16-24, 26, and 28 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent Publication No. 2002/00304170 (Tiedemann). Claims 13, 15, 25, and 27 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Tiedemann.

Claims 1, 10, 16, and 28 were amended to further clarify the iterative technique employed. Claims 2, 3, 13-15, 17-18, and 29 were amended to provide consistency with their respective independent claims.

In accordance with the iterative technique set forth in the claimed subject matter, the number of assigned channelization codes and the power fractions are adjusted over a plurality of iterations to arrive at a solution that optimizes the channel capacity. In particular, the claimed subject matter includes, among other things, evaluating a number representing how many channelization codes are to be assigned to each of the packets and evaluating the portion of the allocated transmission power to be assigned to each data packet using an iterative procedure that adjusts the values for the portions of the allocated transmission power and the number of channelization codes for at least one iteration responsive to the channel quality metrics and the values for the portions of the allocated transmission power and the number of channelization codes determined during at least one prior iteration to optimize a capacity of a channel for communicating the data packets during the current transmission.

Tiedemann fails to teach or suggest these features. The assignment of power fractions is only generally discussed in Tiedemann at paragraph 0035. Tiedemann indicates that various policies may be used, but provides no specific guidance as to how power assignments are made during a current transmission. Tiedemann indicates that power may be split equally across all of the ABR streams, or that individual streams having power requirements likely to be within the available power may be selected. Tiedemann is completely silent regarding how power assignments and numbers of channelization codes are made. With respect to the claimed subject matter, Tiedemann includes absolutely no details regarding adjusting over a plurality of iterations the values for the portions of the available transmission power and the number of channelization codes.

As the Examiner well knows, an anticipating reference by definition must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. *In re Bond*, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). To the extent the Examiner relies on principles of inherency in making the anticipation rejections in the Office Action, inherency requires that the asserted proposition necessarily flow from the disclosure. *In re Oelrich*, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981); *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1463-64 (Bd. Pat. App. & Int. 1990); *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Int. 1987); *In re King*, 231 U.S.P.Q. 136, 138 (Fed. Cir. 1986). It is not enough that a reference could have, should have, or would have been used as the claimed invention. “The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Oelrich*, at 326, quoting *Hansgirk v. Kemmer*, 40 U.S.P.Q. 665, 667 (C.C.P.A. 1939); *In re Rijckaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993), quoting *Oelrich*, at 326; see also *Skinner*, at 1789. “Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a

given set of circumstances is not sufficient.” *Skinner*, at 1789, citing *Oelrich*. Where anticipation is found through inherency, the Office’s burden of establishing *prima facie* anticipation includes the burden of providing “...some evidence or scientific reasoning to establish the reasonableness of the examiner’s belief that the functional limitation is an inherent characteristic of the prior art.” *Skinner* at 1789.

It does not necessarily flow that Tiedemann use the iterative technique set forth in the claimed subject matter. Tiedemann explicitly states that different techniques may be used, so the position that Tiedemann inherently contemplates the claimed subject matter as a matter of necessity cannot be supported. Tiedemann provides no equations or optimization guidelines that teach how a capacity of the channel may be optimized. Moreover, the technique of the claimed subject matter is not obvious in view of Tiedemann in light of the lack of teaching for power and channelization codes. Tiedemann simply does not employ a technique for assigning power fractions and channelization codes that is repeated over a plurality of iterations to optimize channel capacity. To establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

For these reasons, claims 1, 10, 16, 28, and all claims depending therefrom are allowable. Applicants respectfully request the rejections of these claims be withdrawn.

With respect to the dependent claims, the specific features set forth for the iterative technique and the use of optimization parameters, constraints, and cost functions are neither taught nor suggested by Tiedemann. As indicated above, paragraph 0035 mentions power fraction assignments only in vague terms and does not include any specific assignment techniques. The Office Action fails to demonstrate by specific reference to the prior art how the

use of optimization parameters, constraints, and/or a cost function may be used in an iterative technique to optimize channel capacity. The general rejections provided do not address with specificity each and every limitation of the claimed subject matter.

In view of the foregoing, Applicants respectfully submit that all pending claims are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4070 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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/Scott F. Diring/

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